



A QUESTIONNAIRE SURVEY ON CURRENT ENDODONTIC PRACTICE OF DENTAL PRACTITIONERS AND SPECIALISTS IN SOUTHERN REGION OF SAUDI ARABIA

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ABSTRACT

Aim: The aim of this study was to assess the quality and quantity of root canal treatments Performed by general dentists and specialists in southern region of Saudi Arabia.

Methods: A questionnaire survey was distributed amongst 150 general dental practitioners and Specialists in southern area of Saudi Arabia regarding the materials and techniques they use in Endodontic treatment.

Results: A Total of 102 dentists returned the questionnaires giving a response rate of 68%. 42.2% of the respondent used rubber dam during treatment, 82% of the dentists have attended a Training workshop on rotary endodontics, and 64.7 % completed the treatment in multi visits. 54.9% prefer multiple reuses of rotary files, 76.5 uses intra-canal medication in multiple visits Treatments and use of antibiotic and analgesics was occasional depending on the cases

Conclusions: This survey demonstrates that the most of respondents adopted the rotary NiTi Instruments into endodontic practice. However there is a need to have an increase in knowledge and Awareness about rotary endodontics

INTRODUCTION:

The success of endodontic treatment is mostly related with the effectiveness of the cleaning and shaping of the root canal system which determines the quality of disinfection and obturation. The past 10-15 years has altered the way of endodontic practice. The microscope, ultrasonic units with specially configured tips, apex locators and flexible nickel-titanium files in rotary engines have changed the way endodontics is practised. These advances in endodontics should enable dentists to achieve successful treatment outcomes more efficiently by minimising procedural errors, reducing chair side time and discomfort to the patient

The attitude and approaches of general dental practitioner and specialists and their skills, expertise all reflect the quality of root canal treatment conducted in a country. Different studies have been done to assess the success and failure of endodontic treatment, 1-4 and these studies demonstrated that the failure could be fundamentally higher for those teeth which are treated by general dental practitioners and not by specialists. 4 The variety of attitudes toward endodontic treatment can make it verging on difficult to fulfill the endodontic treatment following the aseptic rule that is fundamental for an accomplishment of endodontic treatment. A few studies have researched the attitude of dentists in western countries such as Denmark, 7 UK, 8 Belgium, 9 and USA. 8 Different studies have researched the attitudes of general dental practitioners toward the various aspect of endodontic treatment in the developing countries. 10, 11 Unfortunately, few studies have researched the attitudes of dentist toward endodontic treatment in Saudi Arabia.

The aim of this study was to assess the quality and quantity of root canal treatments Performed by general dentists and specialists in southern region of Saudi Arabia

METHODOLOGY:

A questionnaire was done with all general practitioners and specialists working in southern region of Saudi Arabia. The questionnaire contained data about method of isolation, expertise of rotary instruments usage, type of irrigation used, number of visits to complete endodontic treatment, use of analgesic and antibiotic in endodontic treatments.

The data were collected and descriptive statistical analysis was done using statistical package for social sciences (SPSS) (version 16.0; SPSS Inc, Chicago, IL)

RESULTS:

Out of the 150 questionnaires distributed only 102 responded. The findings of the current survey will be summarized as follows:

With regards to experience 73.5% respondents have working experience of more than 5 years, 12.7 % more than 15 years and the remaining more than 15 years. Average number of endodontic treatment ranged from 0-5 teeth for 54.9% dentist's up to 10 teeth for 16.7% 11-15 for 10.8 % and more than 15 endodontic treatments done by 17.6% responders. Use of Rubber dam during Endodontic practice was utilized by 42.2% in all cases and 57.9 % did not use rubber dam isolation in all their cases. 82.4% dentists have taken a training course on Rotary

Endodontics. 54.9% Responders said that they use rotary files for multiple uses.

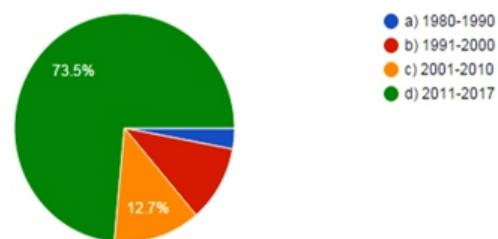
Most of the dentists 64.7% complete their endodontic treatment in multi visits.

If multi visit endodontics is done then 76.5% prefer to use intracanal medication during the visits. 56.9% dentists use sodium hypochlorite as their choice of irrigant, 11.8% used EDTA and 26.5% use a combination of hypochlorite, EDTA and chlorhexidine as an irrigating solution.

75.5 % use analgesic during and after their endodontic treatments while 67.7% dentists use antibiotic s occasionally in their endodontic treatments.

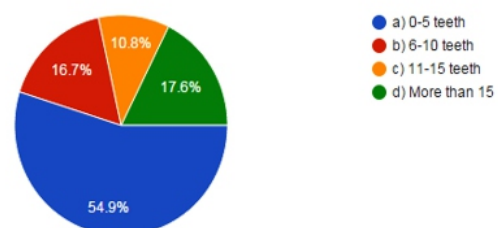
Q1. Year of Graduation.

102 responses



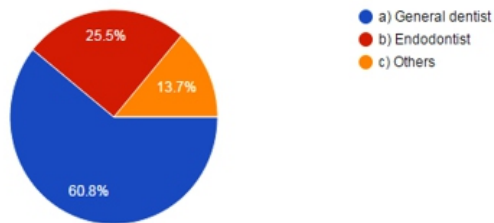
Q2. Average number of endodontic treatment done in a week.

102 responses



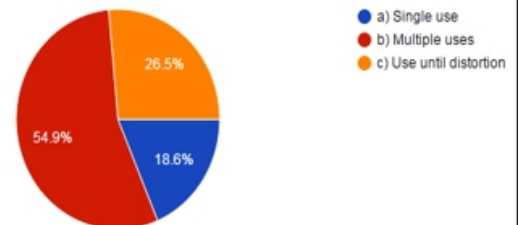
Q3. Use of rubber dam related to your type of practice.

102 responses



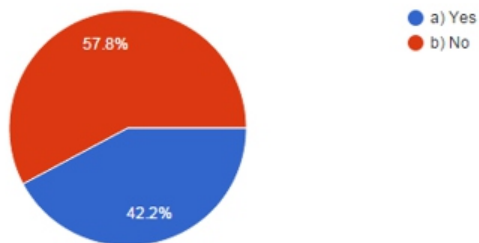
Q7. Reuse of rotary instruments related to type of practice.

102 responses



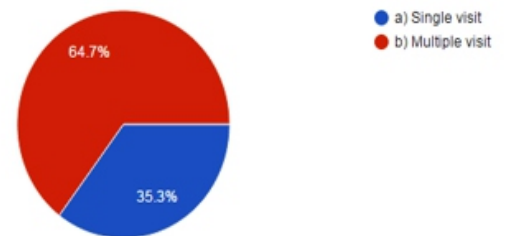
Q4. Do you use Rubber dam in all cases.

102 responses



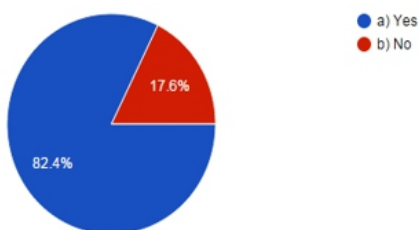
Q8. Number of visits to complete Endodontic Treatment.

102 responses



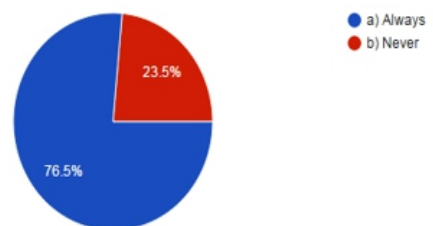
Q5. Have you attended a training course on Rotary Endodontics.

102 responses



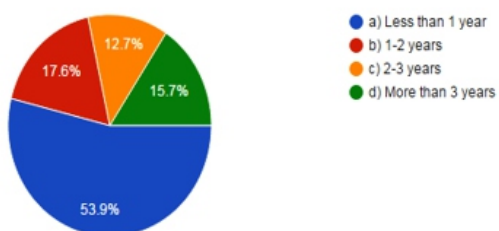
Q9. Use of Intra canal medication in case of multi visit Endodontic treatment.

102 responses



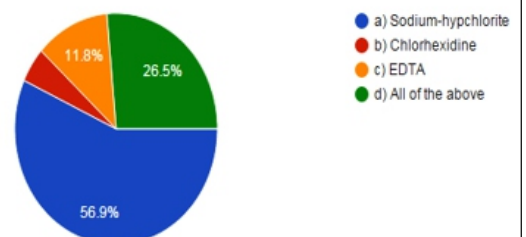
Q6. Lengths of time of use rotary Instruments.

102 responses



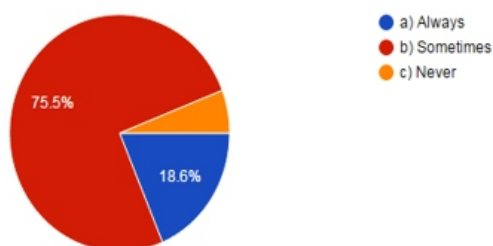
Q10. What type of irrigation do you use during instrumentation.

102 responses

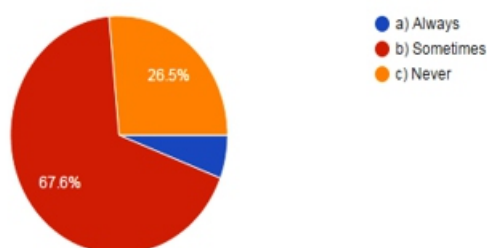


Q11. Use of Analgesics during and after treatment.

102 responses

**Q12. Use of Antibiotics during and after treatment.**

102 responses

**DISCUSSION:**

The study was conducted in southern area of Saudi Arabia. A questionnaire survey regarding the current endodontic practice done by general dentist and other dental specialist was done. The responses rate was 68% as some of the dentist did not respond to the questionnaire.

The results obtained from this questionnaire can be considered as a reliable method of evaluating the endodontic treatment procedures used in southern region.

Rubber dam isolation is considered the standard of care in Endodontics. Marshall and Page (1990) reported (60%) not to use rubber dam for any procedure in the UK, whereas only 5% of the dentists working principally in the National Health Service (NHS) used rubber dam for endodontic treatment. General dental practitioners may equate rubber dam use with time loss, patient pain, extra cost, frustration and irritation (Christensen, 1994). The majority of dental practitioners (42.2%) in this study used Rubber dam isolation in their endodontic practice.

This survey shows that general dental practitioners and specialists (64.7%) prefer multi visits endodontics probably due to be due to the lack of modern endodontic equipments like electronic measurement devices or rotary instruments.

82.5% of the responds 'have undergone a workshop on rotary endodontics but still need more emphasis on the reuse of the instruments.

A relatively high percentage (76.5%) of the general dental practitioners and specialists used intra-canal medicaments in this study as most of the endodontic treatment is done in multi visits.

NaOCl is recommended as the material of choice for irrigating the root canal system in view of its effective antimicrobial and tissue dissolving activity. In this study, larger parts of over-viewed dentists 56.9% were utilizing NaOCl as the root canal irrigant. The selection of irrigant should be associated with the utilization of rubber dam, as it was found that 70% Sodium hypochlorite is proven to be the most effective antimicrobial agent (Bystrom and Sundqvist, 1983). In a study of Whitten et al. (1996) 79% of the general dental practitioners used sodium hypochlorite as irrigant. 26.5% of the general practitioners and specialist used combination of NaOCl EDTA and Chlorhexidine as irrigation for root canals.

A relatively high percentage (76.5%) of the general dental practitioners and specialists used intracanal medicaments in this study.

A number of studies have revealed that much of the endodontic provision falls below international standards of care (Pitt Ford et al., 1983; Saunders et al., 1997). In a study of De Moor et al. (2000), in a Belgian subpopulation, 56.7% of the root-filled teeth were deemed inadequate.

The limited number of specialized endodontists as well as the low inclination of general dental practitioners to refer patients could be the reasons behind the endodontic treatment falls below the international standards of care in Saudi Arabia.

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